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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,236	07/11/2003	Todd E. Kooken	LEE 200311	2856

27885 7590 07/26/2005

FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP  
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CLEVELAND, OH 44114

EXAMINER
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SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/617,236

Applicant(s)

KOOKEN ET AL.

Examiner

Clifford C. Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17, 22, 23, 28, 29 and 38-41 is/are allowed.
- 6) ☒ Claim(s) 18-21, 24-27 and 30-37 is/are rejected.
- 7) ☒ Claim(s) 42 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0516.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Detailed Action**

1.) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2.) Claims 24-27 and 30-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the last line of each of claim 24 and claim 30, it is not clear what limitation applicant intends by the language “passages to accommodating said primary winding”. The other claims are inadequate under 35 USC 112 in that they depend from one of claims 24 or 30.

3.) Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartmann (2,719,275, previously cited). Figure 1 of Hartmann (2,719,275) discloses a module forming the secondary winding of a high frequency transformer with the features claimed, including: a first coaxial set of concentric, telescoped conductive tubes labeled a1 to a7 and separated by a tubular insulator shown as the crosshatched material between the conductive tubes; a second set of tubes labeled a2 to a8; magnetic cores e1 and e2; elongated central passages associated with a1 and a2; and conductors labeled c connecting the tubes as claimed. In regard to the claim language specifying that the elongated central passage has an intended use “for accommodating at least one primary winding”, this language does not patentably distinguish over the structure shown in Hartmann (2,719,275). It would be possible to snake a winding

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through the central passage in a1 and a2, satisfying the intended-use language. In regard to claim 19, note plural doughnut shaped rings at b1, e1, b2, and e2.

4.) Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann (2,719,275) as applied to claims 18 and 19 above, and further in view of Diener et al. (3,004,135). The only aspect of the claims to which the rejection above does not apply is the provision for helix type tubes. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any conventional type of tube for elements "a" in Hartmann (2,719,275). In particular, it would have been obvious to have used a tube with the helixed ribbon features claimed, the motivation being the teachings of Diener et al. (3,004,135) that forming a tube from a helixed ribbon is advantageous (see figure 1, element 7 and helical seam 71 in Diener et al. (3,004,135)).

5.) Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikata et al. (6,665,183). Figures 1, 2, and 3 in the patent to Shikata et al. (6,665,183) disclose a high frequency transformer for electric arc welding and a power source for electric arc welding with features claimed, including: a transformer unit comprised of modules 24a and 24b wherein the secondary windings 24a-s and 24b-s of respective modules 24a and 24b are connected in parallel; and a high switching speed inverter associated with elements 16a and 16b. The claims differ from Shikata et al. (6,665,183) in calling for: the modules to be readily removable from each other (claim 34); the total output current to be the sum of the current capacities of the separate modules (claim 35); a total output in excess of 1000 amperes (claim 36); and equal

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current capacities (claim 37). These differences do not patentably distinguish over Shikata et al. (6,665,183). The modules 24a and 24b in Shikata et al. (6,665,183) are disclosed as being independently mounted on the main circuit board of the power supply (see figure 1 of Shikata et al. (6,665,183)). At the time applicant's invention was made, it would have been obvious that these modules be removable from the circuit board, the motivation being such routine considerations as being able to replace defective modules, thereby satisfying claim 34. In regard to claims 35 and 36, it would have been obvious to operate the power supply in Shikata et al. (6,665,183) at any convenient current level, including at the "sum of the capacities" of claim 35 or the 1000 amperes of claim 36, depending on the needs of the particular welding situation the power supply was being used for. In regard to claim 37, it is considered obvious that the modules 24a and 24b in Shikata et al. (6,665,183) are identical and thus have the same current capacity, because this is the most reasonable interpretation of the descriptions on elements 24a and 24b in Shikata et al. (6,665,183).

6.) Claims 42 and 43 are objected to for depending from rejected claims, but would be given favorable consideration if recast in independent form to include all of the limitations of the parent claims. None of the prior art of record teaches or suggests the particular module structure set forth in the claims.

7.) Claims 24 and 30 would be given favorable consideration if suitably amended to overcome the rejection under 35USC112 above and if amended to include the primary winding as a structural element in the claims. This could be accomplished by simply changing "passages

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to accommodating” to passages accommodating in the last line of each claim. Similarly, the rejection of claim 18 on prior art would be overcome if the primary winding was included as a structural element in the claim. This could be accomplished in claim 18 by deleting the word “for” in line 5 of the claim.

8.) Claims 1-17, 22, 23, 28, 29, and 38-41 are allowable over the prior art of record. None of the prior art of record teaches or suggests the particular module structure of independent claim 1 or the particular transformer structure in the arc welders of independent claims 22 and 28. The other claims are allowable at least because they depend from allowable independent claims.

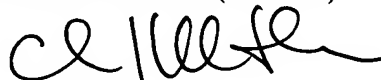
9.) Applicant's arguments filed 5/11/2005 have been fully considered but they are not persuasive of patentability. Claims 1-17, 22, 23, 28, 29, and 38-41 are allowable and claims 42, 43 are deemed to contain allowable subject matter. The other claims are considered to be unpatentable for the reasons set forth above.

Any inquiry concerning this communication should be directed to Clifford C. Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

July 21, 2005